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10/518,576	07/01/2005	Hideki Asazu	263124US6PCT	8414

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EXAMINER	
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ART UNIT	PAPER NUMBER
4121	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/518,576	ASAZU ET AL.	
	Examiner	Art Unit	
	Muktesh G. Gupta	4121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 July 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/21/2004,01/09/2007, 02/26/2007, 05/18/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. **Claims 1- 43** have been examined and are pending.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 05/18/2007, 02/26/2007 01/09/2007 and 12/21/2004 are being considered by the examiner.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/518576 filed on 07/01/2005.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 17 - 20,** are rejected under 35 U.S.C. 101 as claimed invention is directed to non-statutory subject matter.

Claims 17 - 20, are directed to a "computer program written in a computer readable format", which does not constitute statutory subject matter such as a process, machine, article of manufacture or composition or matter. In contrast, a claimed computer-readable medium having instructions is a computer element which

defines structural and functional interrelationships between the instructions and the computer to permit the instructions' functionality to be realized, and is thus statutory. Examiner suggests changing the claim language to incorporate a computer-readable medium for storing instructions of the program. Also see pages 30 and 53 of the Interim Guidelines for Examination of Patent applications for Patent Subject Matter Eligibility.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. **Claims 1- 43,** are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent No. 6493872 to Rangan, P. Venkat et al., (hereinafter "Rangan").

As to Claims 1, 13, 17 and 21, Rangan teaches content related information provision apparatus, method, computer program stored on media and annotation system that provides related information on contents consisting of reference data arranged in time series, characterized by comprising (as stated in col. 5, lines 53-60, and col. 3, lines 53-54, ***method*** and ***apparatus*** is provided which allows a

authoring functioning using ***software modules***, in a video editing mode to initiate ***tracking*** of any ***image entity or entities*** in a ***video data stream which*** have ***timing markers*** inserted into the first ***video data stream)***:

related information storing means that stores related information on contents (as stated in col. 4, lines 37-39, reading the ***first video data stream (related information) stored*** in a ***first*** controllable ***dynamic buffer*** for inserted ***frame identifiers identifying frames*** from the second ***data stream***);

reference information storing means that stores reference information specifying contents to be referred to by the related information and a data reference position in the contents (as stated in col. 4, lines 40-42, reading ***frame identifiers*** from the annotation system ***second data stream (reference information) stored*** in a ***second*** controllable ***dynamic buffer)***;

and information delivering means that delivers related information and/or reference information (as stated in col. 4, lines 65-67, and col. 5, lines 1-3, apparatus and methods are provided allowing ***data streams*** to be ***marked*** while operated in synchronization, and to then be ***delivered*** by different ***networks*** having different latency effects, such that the streams are not synchronous as received, but may be re-synchronized using the marks provided while the streams were synchronous).

As to Claims 2, 14, 18 and 22, Rangan teaches content related information provision apparatus, method, computer program stored on media and annotation system, according to claims 1, 13, 17 and 21, characterized by further comprising:

means that specifies an installation region of a terminal apparatus to be a delivery destination according to the information delivering means (as stated in col. 18, lines 1-5, and col. 17, lines 15-16, signature application module resident in ***authoring server*** is initiated after and ***coordinate tracking*** and ***annotation*** has been performed and ***synchronization*** of Video data stream and Annotation data stream is achieved in the authoring server);

and information changing means that changes contents of related information and/or reference information, which should be delivered, according to the installation region (as stated in col. 18, lines 29-32, col. 18, lines 6-10, and col. 17, lines 55-60, ***number/time marker-generator*** module generates code to represent frames in annotation stream and also to represent time markers in video streams. Video and annotation streams are given ***frame-specific identification*** and marking as well as ***time-stamped*** so that they may later be ***synchronized*** by using inserted data corresponding to the ***frame-specific identification***. The signature streams are then sent to their respective ***broadcast and/or data-transmission systems*** to be sent to an ***end user***).

As to Claims 3, 15, 19 and 23, Rangan teaches content related information provision apparatus, method, computer program stored on media and annotation

system, according to claims 1, 13, 17 and 21, characterized in that the contents refer to a broadcast program, and the reference information includes information specifying a broadcasting station, which broadcasts or has broadcasted a program, and information specifying a date and time when a reference part in a program is broadcasted or has been broadcasted (as stated in col. 6, lines 39-50, col. 3, lines 33-38, ***authoring station*** comprises ***software module*** that may process various media analog or digital not limited to common formats such as Audio Video Interleave AVI and Moving Pictures Experts Group MPEG. Video source may embody any ***video source (contents)*** that may be known in the art such as a CD-ROM, ***Satellite TV***, ***cable TV***, VCR, ***Internet Server***. ***Video source*** may provide ***prerecorded video*** or ***live broadcast video***. The first data stream is a live video data stream and ***timing markers*** are placed by the writer in the ***first data stream***, the second data stream is an ***annotation data stream (reference information)*** authored in ***synchronization*** with the first ***data stream***. The ***annotation data stream*** includes ***tracking data*** with ***time stamps*** derived from tracking an entity in the ***first data stream (contents)***).

As to Claims 4, 5, 16, 20 and 24, Rangan teaches content related information provision apparatus, method, computer program stored on media and annotation system, according to claims 3, 14, 18 and 23, characterized in that the reference information specifies a broadcasting station, which broadcasts or has broadcasted a program, using a channel number (as stated in col. 6, lines 39-50, col. 3, lines 33-38,

col. 9, lines 49-52 and col. 7, lines 34-41, ***first data stream*** is a live video data stream ***(broadcasted program)*** and ***frame identifiers*** and ***timing markers*** are implemented by various methods, such as ***binary numbers*** and are placed by the writer in the ***first data stream***, timing marks in some cases are at intervals of a number of frames by convention and are representation of ***value table*** for ***storing values***. The values being collected and stored may be kept in any ***logical order*** such as in a ***data list*** or the like. The ***second data stream*** is an ***annotation data stream (reference information) authored*** in ***synchronization*** with the first ***data stream***. The ***annotation data stream*** includes ***tracking data (reference information)*** derived from tracking an entity in the ***first data stream (content). User interaction*** with such an image entity during viewing of a video can be programmed to provide ***additional network-stored information*** about that entity to suitable customer premises equipment adapted to receive and display the ***information***, as an ***overlay*** on the display of the dynamic video containing the ***subject image entity***).

As to Claims 6, and 27, Rangan teaches content related information provision apparatus, and annotation system, according to claims 1, and 21, characterized in that the information delivering means includes identification information of a site handling information resources related to contents in the reference information and delivers the identification information (as stated in col. 13, lines 45-48, col. 15, lines 5-8, col. 16, lines 27-35, ***Authoring system*** comprises multiple ***authoring stations***

(site handling information) equipped with ***software*** capable of ***tracking*** images through ***tracking module*** and provide frame by frame ***tracking coordinates*** and to be a vehicle through which ***additional annotations*** may be provided through user interface, an author may set up the ***parameters*** for ***tracking***, with reference and add additional ***annotation*** such as static or moving image icons, ***formatted text***, animated graphics, to a single live or pre-recorded video feed via an innovative synchronous architecture which allows multiple image tracking and annotation operations to be performed simultaneously in near real-time such that delay of the broadcast video to an end user is negligible. ***Authoring server*** is provided and adapted to ***combine annotation streams*** through ***frame-specific identification numbers, time stamps, and markings***, into one annotation stream, in this way, all annotations performed separately may be combined and may act in unison at the users end).

As to Claims 7, and 28, Rangan teaches content related information provision apparatus, and annotation system, according to claims 1, and 21, characterized in that the information delivering means includes information for correcting deviation of a clock in a terminal apparatus to be a delivery destination in the reference information and delivers the information (as stated in col. 18, lines 30-33, col. 19, line 67, and col. 19, lines 51-54, more than one, or several, of the ***synchronization schemes*** may be used in any instance. A ***number/time marker-generator*** module generates ***code*** to represent frames in ***annotation stream*** and also to represent

time markers in ***video stream***. In some instances it may be necessary for the ***servers*** and the ***user's equipment*** to be ***synchronized in time***, the ***clock*** at the ***server*** end is ***synchronized*** and checked with, and corresponded ***clock*** at the ***user's end***).

As to Claims 8, and 29, Rangan teaches content related information provision apparatus, and annotation system, according to claims 1, and 21, characterized in that the information delivering means includes a characteristic amount of contents at a reference position in the contents in the reference information and delivers the characteristic amount (as stated in col. 16, lines 27-34, ***tracking module*** is provided and adapted to ***track*** an image and provide ***frame by frame tracking coordinates*** and to be a vehicle through which additional ***annotations*** may be provided through user interface, an ***author*** may set up the ***parameters*** for ***tracking*** such as are described with reference to ***specific position***, as well as ***add*** additional ***annotation*** such as static or moving image icons, formatted text, animated graphics, sounds and the like).

As to Claims 9, and 30, Rangan teaches content related information provision apparatus, and annotation system, according to claims 1, and 21, characterized in that the information delivering means delivers plural pieces of reference information collectively (as stated in col. 17, lines 41-45, ***synchronization module*** is added in ***authoring server*** and adapted to ***synchronize separate (plural) annotation***

streams (reference information) before ***combining*** them and synchronizing them with the output video stream).

As to Claims 10, and 33, Rangan teaches content related information provision apparatus, and annotation system, according to claims 1, and 21, characterized in that the information delivering means delivers the related information and/or the reference information in accordance with an HTTP (Hyper Text Transfer Protocol) (as stated in col. 1, lines 35-38, and lines 47-55, developers are introducing integrated systems ***combining TVs*** with ***computer subsystems***, so a TV may be used as a ***WEB browser***, ***(viewing web pages in HTTP)*** or a ***PC*** may be used for enhanced ***TV*** viewing***(broadcast programs)***. One may thus, with a properly equipped system, select to view analog TV programs, digital TV programs, conventional cable TV, satellite TV, pay TV from various sources, and browse the WWW as well, displaying ***WEB pages*** and ***interacting*** with ***on-screen fields*** and ***relational systems*** for jumping to ***related information***, databases, and other ***WEB pages***. The capabilities are often integrated into a single display, that is, one may view a ***broadcast presentation*** and also have a window on the display for ***WEB interaction***).

As to Claims 11, and 34, Rangan teaches content related information provision apparatus, and annotation system, according to claims 1, and 21, characterized in that the information delivering means delivers the related information and/or the

reference information in accordance with an SMTP (Simple Mail Transfer Protocol) (as stated in col. 5, lines 66-67, col. 6, lines 1-5, lines 35-38, col. 14, lines 20-22, original video data source may be any recorded or live broadcast source and is ***not limited*** as to ***protocol***. ***Annotations and alterations*** may be made by adding annotations including ***interactive icons***, ***text***, ***animated graphics*** and ***sounds***, to the input data stream source in the authoring station, and output from authoring station is meant to be a indication of ***data output***, and not to indicate that there is a single data stream. There may be ***multiple streams*** of ***various protocols*** and is ***not limited (any protocol may be used)*** by the medium of ***transport protocols*** used for ***transmitting*** the video and the annotation data stream**)**.

As to Claims 12, and 35, Rangan teaches content related information provision apparatus, and annotation system, according to claims 1, and 21, characterized in that the information delivering means designates a character string, which is capable of identifying reference information, in a header of a delivery message at the time of delivery of reference information (as stated in col. 18, lines 35-40, lines 29-34, col. 19, lines 61-65 and col. 20, lines 60-65, ***user interface*** may ***pre-programmed*** by an ***author*** to supply the appropriate ***pre-selected annotations*** in a ***reactive*** fashion. That is, according to a specific time interval, a ***signal*** could ***initiate annotation inserts*** and so on. In other embodiments, an author may physically enter an ***annotation*** via pressing ***pre-defined keys*** on a ***keyboard*** and so on. There are many known methods for inserting annotations. Several separate

signature methods, for analog video, digital video, are used to insure that synchronization information survives to the customer's equipment end. A ***number/time marker-generator module generates code (string)*** to represent frames in annotation stream and also to represent time markers in video stream. Further, if the video is in a digital format, such as Motion Picture Expert's Group (MPEG), SMPTE-like ***time stamps*** may be inserted into the ***headers*** in the ***data packets*** which are then compared with time stamps in the control stream. ***Annotation frame numbers*** are written into areas associated with ***video frames*** as well as to the appropriate ***annotation frame headers***).

As to Claims 25-26, Rangan teaches annotation system, according to claim 21, characterized in that the transmitting means transmits a name of a bulletin board, in which a corresponding remark is written, with the name included in the reference information (as stated in col. 14, lines 35-40, and col. 16, lines 51-60, FIG. 8 is a block diagram illustrating a ***multiple authoring station*** architecture for authoring system that are adapted for tracking image entities and providing additional annotation, add annotation such as static or moving image icons, formatted text, animated graphics, sounds including annotation regarding tracked entities. An annotation manager converts annotation data, input during annotation processes and the data relating to the tracked entities output from the tracking module, to metadata for more compact ***transmission*** in output data stream ***containing information*** about the various ***annotations added*** by the ***author*** of ***authoring***

station and the tracking co-ordinates of the tracked entities and is analogous to the ***annotation stream (reference information).*** User interface provides considerable option and capability for entering commands to add image icons, animated graphics, following tracked objects or static or moving independently in the video in predefined manner, ***formatted text captions*** and so on).

As to Claim 31, Rangan teaches annotation system, according to claim 21, characterized by further comprising means that, in writing of a remark, transmits an execution code for automatically acquiring reference information or urging a user to input a remark to a terminal apparatus side of a requiring source (as stated in col. 14, lines 35-40, single ***annotated video-stream*** is output from display module to a suitable connected display monitor or screen. An ***input signal*** represents ***user interaction*** with an entity in ***video stream*** as it is displayed. Such a ***input signal*** may ***trigger downloading*** of ***additional detailed information*** regarding the ***subject of interaction***. Interaction signal results from a mouse click or other ***input command*** such as may be initiated via a connected keyboard or a remote pointing device or the like).

As to Claim 32, Rangan teaches annotation system, according to claim 21, characterized by further comprising means that, concerning an execution code for automatically acquiring reference information stored in the terminal apparatus of the requesting source in advance or urging a user to input a remark, transmits

information necessary for starting the execution code to the terminal apparatus (as stated in col. 17, lines 58-65, video/data stream signature operation is ***executed*** after coordinate ***tracking*** and ***annotation*** operations are performed in an authoring station. The signature streams are then sent to their respective ***broadcast*** and/or ***data-transmission systems*** to ***transmit information*** to an end user. ***Video/annotation stream capture*** and ***synchronization*** operations, ***executed*** via ***software*** on customer premises equipment is ***executed*** at the ***user's end*** for a single combined stream to be viewed by the ***user***).

As to Claim 36, Rangan teaches annotation system, according to claim 23, characterized by further comprising:

means that, concerning a program series to be an object of an argument in a bulletin board, specifies a broadcast schedule for the next broadcast of the series (as stated in col. 6, lines 6-16, Purpose of the ***authoring station*** is ***addition of innovative material*** as ***annotations and alterations*** to the video data stream, such as ***text overlay***, graphic icons and logos for advertisement and ***interaction with viewer***, associated with ***identity and address data*** to allow a ***viewer*** at a computerized end station to access advertisements and other ***data*** which may be associated with individual entities in the video presentation);

and means that transmits the broadcast schedule to a terminal apparatus of a request source (as stated in col. 7, lines 29-40, Through tracking process and additional editing processes a moving region associated with the image entity in a

display may be made to be ***interactive*** and ***identifiable*** to an ***end user***. User ***interaction*** with such an image entity during viewing of a video can be ***programmed*** to provide additional ***network-stored information*** about that ***entity*** to customer premises equipment adapted to receive and display the information. Such ***network-stored information (broadcast schedule)*** is ***transmitted*** and may be displayed, as an ***overlay*** on the display of the dynamic video containing the ***subject image entity***).

As to Claim 37, Rangan teaches annotation system, according to claim 36, characterized by further comprising means that sets a bulletin board for each program series and performs download of the program schedule from a screen displaying information in the bulletin board or a screen displaying a list of remarks in the bulletin board (as stated in col. 22, lines 34-42, single ***annotated video-stream*** is output from display module to a suitable connected ***display monitor*** or ***screen***. An input signal represents ***user interaction*** with an ***entity*** in ***video stream*** as it is ***displayed***. Such ***input signal*** may ***trigger downloading*** of ***additional*** detailed ***information*** of ***network-stored information (broadcast schedule)*** regarding the subject of ***interaction***. Interaction signal results from a mouse click or other input command such as may be initiated via a connected keyboard or a remote pointing device or the like).

As to Claim 38, Rangan teaches annotation system, according to claim 23, characterized by further comprising:

means that specifies a rebroadcast schedule for a program to be an object of a remark (as stated in col. 23, lines 32-40, user or users that receive the video data via broadcast, and the ***annotation data*** via a WAN, or the Internet. ***Additional data***, ***network-stored information (rebroadcast schedule)*** obtained by a user through ***interaction*** with a tracked entity in the video may be ***personalized*** and ***specific*** to the ***user*** through ***annotation data***);

and means that transmits the rebroadcast schedule to a terminal apparatus of a request source (as stated in col. 23, lines 32-40, col. 22, lines 57-67, In a case such as this a user would, perhaps, obtain a ***subscription*** to the ***service*** (program, broadcast), for other ***rebroadcast schedule*** and data delivery methods. ***Prerecorded*** and ***authored video*** feed from a source connected to an optional input module may be synchronized with a previously stored and annotated data stream from a source connected to a second optional input module as long as the signature process was applied to both streams. ***Interaction*** with tracked entities and the like associated with the ***prerecorded streams*** may be sent to a participating ***Internet server*** or the like for ***rebroadcast*** through the modem sub-module and the system is on-line during viewing).

As to Claim 39, Rangan teaches annotation system, according to claim 38, characterized in that the transmitting means transmits the rebroadcast schedule with

the rebroadcast schedule included in reference information (as stated in col. 23, lines 32-40, user or users that receive the video data via broadcast, and the ***annotation data*** via a WAN, or the Internet. ***Additional data***, ***network-stored information (rebroadcast schedule)*** obtained by a user through ***interaction*** with a tracked entity in the video may be ***personalized*** and ***specific*** to the ***user*** through ***annotation data (reference information)***).

As to Claim 40, Rangan teaches annotation system, according to claim 21, characterized by further comprising:

means that designates retrieval conditions for a remark (as stated in col. 22, lines 34-42, single annotated video-stream is output from display module to a suitable connected display monitor or screen. An input signal represents ***user's interaction*** with an ***entity*** in video stream as it is displayed. Such a ***signal*** may ***trigger*** downloading of additional detailed ***information*** regarding the subject of ***interaction)***;

and means that retrieves a remark across plural bulletin boards on the basis of the designated retrieval conditions (as stated in col. 22, lines 34-42, ***Interaction signal*** results from a ***mouse click*** or other ***input command*** such as may be ***initiated*** via a ***connected keyboard*** or a ***remote pointing device*** or the like by the ***user's***).

As to Claim 41, Rangan teaches annotation system, according to claim 40, characterized in that the bulletin board system uses a keyword included in a remark or designated separately at the time of writing the remark as retrieval conditions (as stated in col. 22, lines 34-42, ***Interaction signal*** results from a ***mouse click*** or other ***input command*** such as may be ***initiated*** via a ***connected keyboard*** or a ***remote pointing device*** or the like by the ***user's***).

As to Claim 42, Rangan teaches annotation system, according to claim 40, characterized in that the bulletin board system uses a name or an ID of a user who has written the remark as retrieval conditions (as stated in col. 7, lines 29-40, Through ***tracking process*** and additional ***editing processes*** a moving region associated with the image entity in a display may be made to be ***interactive*** and ***identifiable*** to an ***end user***. User ***interaction*** with such an image entity during viewing of a video can be ***programmed*** to provide additional ***network-stored information*** about that ***entity*** to customer premises equipment adapted to receive and display the information. Such ***network-stored information (broadcast schedule)*** is ***transmitted*** and may be displayed, as an ***overlay*** on the display of the dynamic video containing the ***subject image entity***).

As to Claim 43, Rangan teaches annotation system, according to claim 40, characterized in that the bulletin board system uses a date and time when the remark is written as retrieval conditions (as stated in col. 18, lines 29-34,

number/time marker-generator module generates code to represent frames in ***annotation stream*** and represent ***time markers*** in video stream).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 7168084 to Hendricks, John S. et al., US Patent No. 7143066 to Shear, Victor H. et al., US Patent No. 7095450 to Holmes, Steven et al., US Patent No. 6173317 to Chaddha, Navin et al., are cited for reference purpose only.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Muktesh G. Gupta whose telephone number is 571-270-5011. The examiner can normally be reached on Monday-Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi T. Arani can be reached on 571-272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

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MG

/Taghi T. Arani/
Supervisory Patent Examiner, Art Unit 4121
1/25/2008